

US 395 North Spokane Corridor Project

1997 Final Environmental Impact Statement Preferred Alternative Model



1997 FEIS ALTERNATIVE

PRELIMINARY - SUBJECT TO REVISION SEPTEMBER 18, 2001

Utilizes existing I-90 structures and ramps (except eastbound flyover)

Matches FEIS and Access Point Decision

Southbound Hamilton to I-90 ramps do not meet driver expectancy

No direct connections to/from South Hill

Existing geometrics of I-90 curves and ramps

Requires removal/replacement of Arthur/Sherman structures and walls

Decreases Level of Service at Trent/Hamilton

Creates a weaving problem between Division on-ramp and the C-D/Hamilton off-ramp

Substandard ramp-splits off of existing

Substandard median and shoulder widths



MODIFIED FINAL ENVIRONMENTAL IMPACT STATEMENT ALTERNATIVE

PRELIMINARY - SUBJECT TO REVISION SEPTEMBER 18, 2001

Advantages

Utilizes existing I-90 structures and ramps

Provides full I-90 movements

Minimizes park impacts

Impacts / Disadvantages

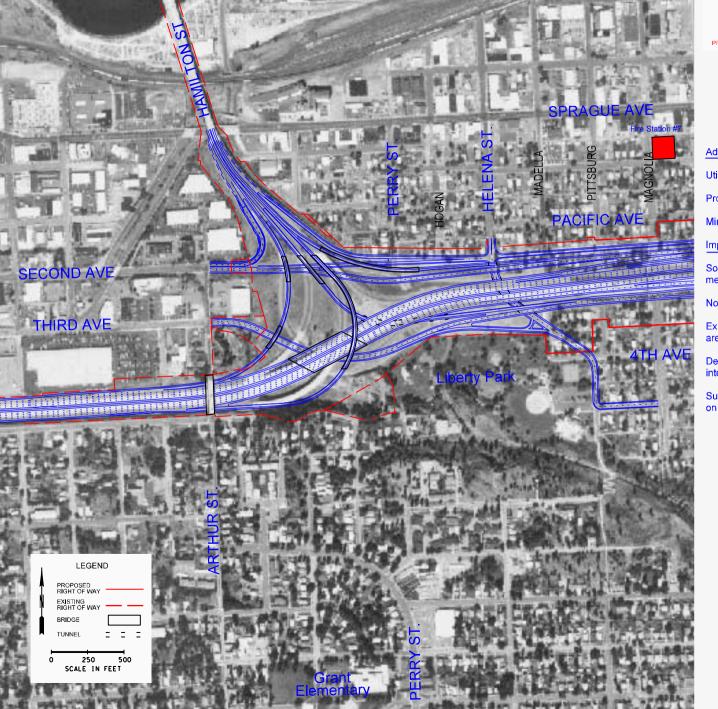
Southbound Hamilton to I-90 ramps do not meet driver expectancy

No direct connections to/from South Hill

Existing geometrics of I-90 curves and ramps are substandard

Decreases Level of Service at Trent/Hamilton intersection

Substandard median and shoulder widths on I-90



MODIFIED LIBERTY PARK INTERCHANGE ALTERNATIVE

PRELIMINARY - SUBJECT TO REVISION SEPTEMBER 18, 2001

Advantages

Utilizes existing I-90 structures and ramps

Provides full I-90 movements

Minimizes park impacts

Impacts / Disadvantages

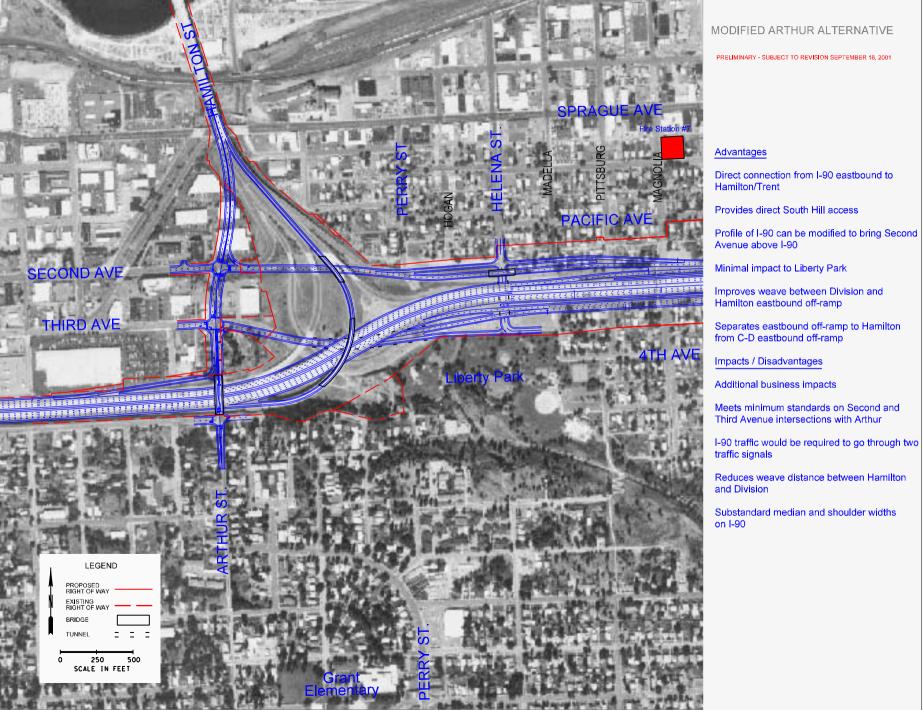
Southbound Hamilton to I-90 ramps do not meet driver expectancy

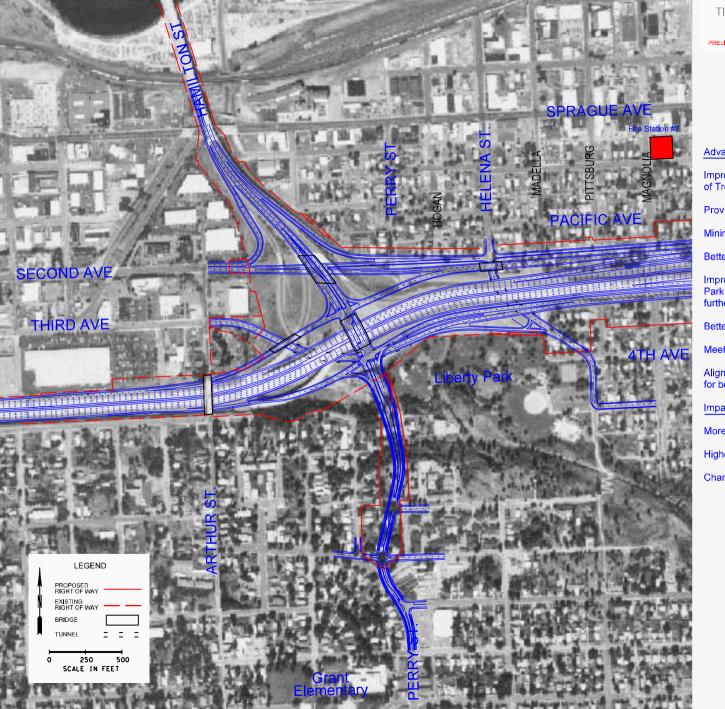
No direct connections to/from South Hill

Existing geometrics of I-90 curves and ramps are substandard

Decreases Level of Service at Trent/Hamilton intersection

Substandard median and shoulder widths on I-90





TIGHT URBAN DESIGN (TUD) ALTERNATIVE

PRELIMINARY - SUBJECT TO REVISION SEPTEMBER 18, 2001

Advantages

Improves Level of Service at the intersection of Trent and Hamilton

Provides direct South Hill access

Minimizes park impacts

Better distribution of traffic on local network

Improves weave between Division and Liberty Park by moving eastbound C-D exit further east

Better expansion abilities

Meets driver expectancy

Alignment and profile of I-90 can be modified for better geometrics

Impacts / Disadvantages

More residential and business impacts

Higher cost

Changes traffic patterns on the South Hill



MODIFIED TIGHT URBAN DESIGN (TUD) ALTERNATIVE

PRELIMINARY - SUBJECT TO REVISION SEPTEMBER 18, 2001

Advantages

Improves Level of Service at the intersection of Trent and Hamilton

Minimizes park impacts

Better distribution of traffic on local network

Improves weave between Division and Liberty Park by moving eastbound C-D exit further east

Better expansion abilities

Meets driver expectancy

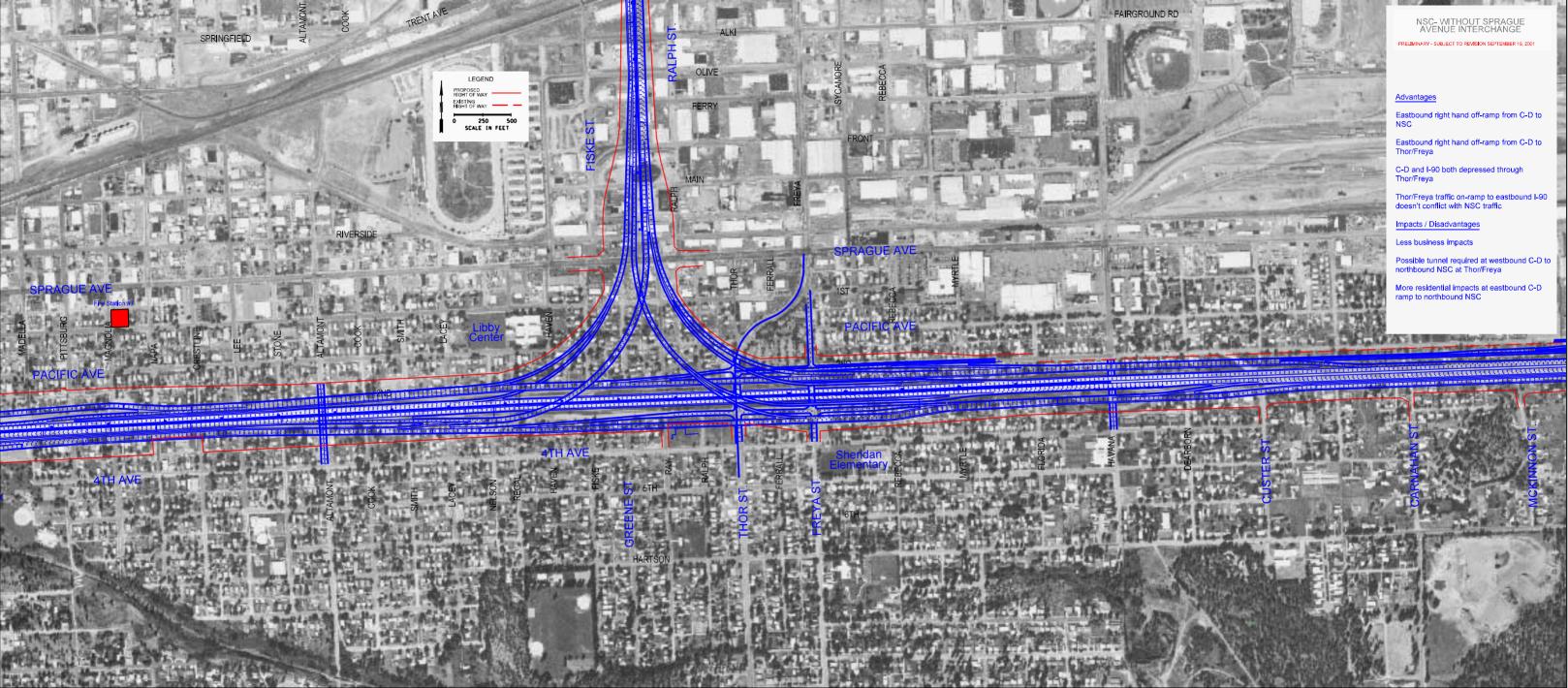
Alignment and profile of I-90 can be modified for better geometrics

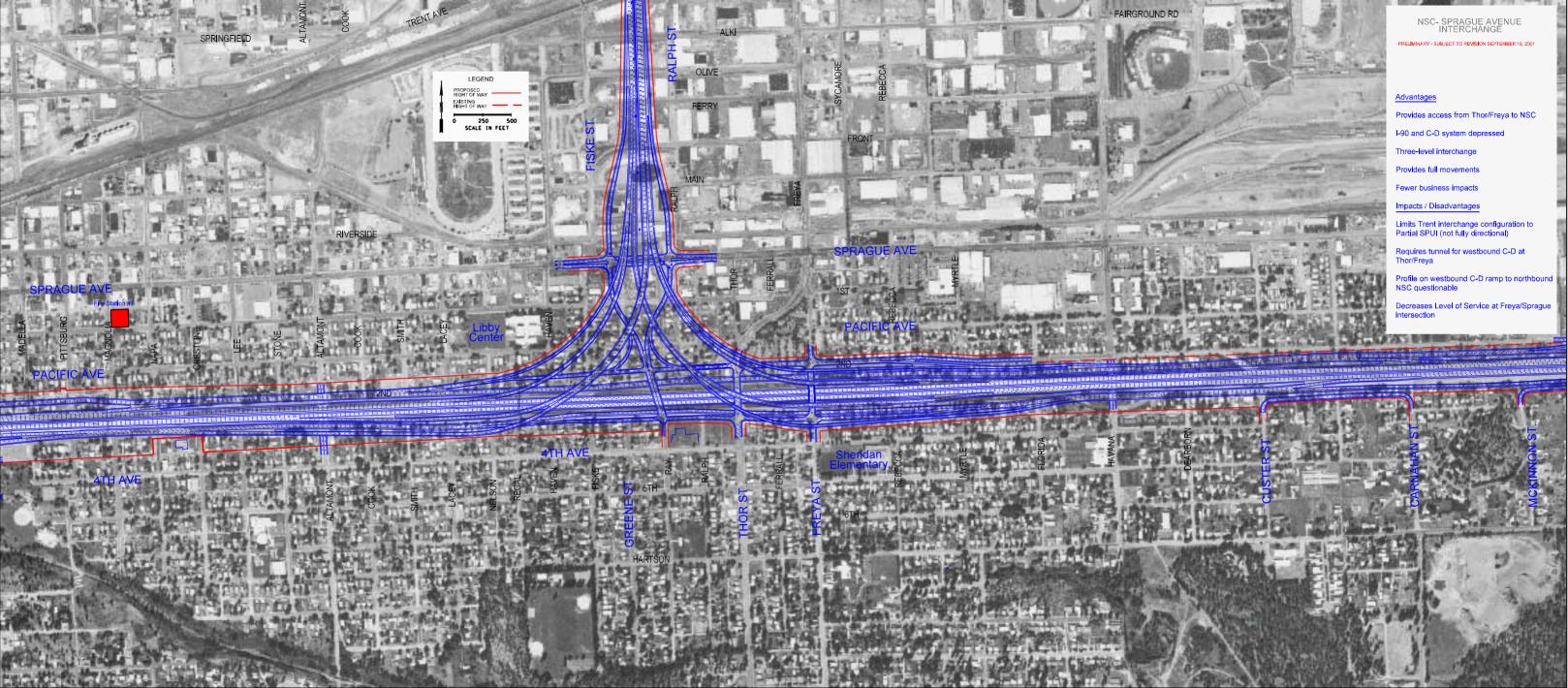
Impacts / Disadvantages

More residential and business impacts

Higher cost







1997 FEIS ALTERNATIVE

PRELIMINARY - SUBJECT TO REVISION SEPTEMBER 18, 2001

Advantages

Improves Level of Service at the Intersection of Trent and Hamilton

Minimizes Park Impacts

Better Distribution of Traffic on Local Network

Improves Weave between Division and Liberty Park by Moving EB C-D Exit Further East

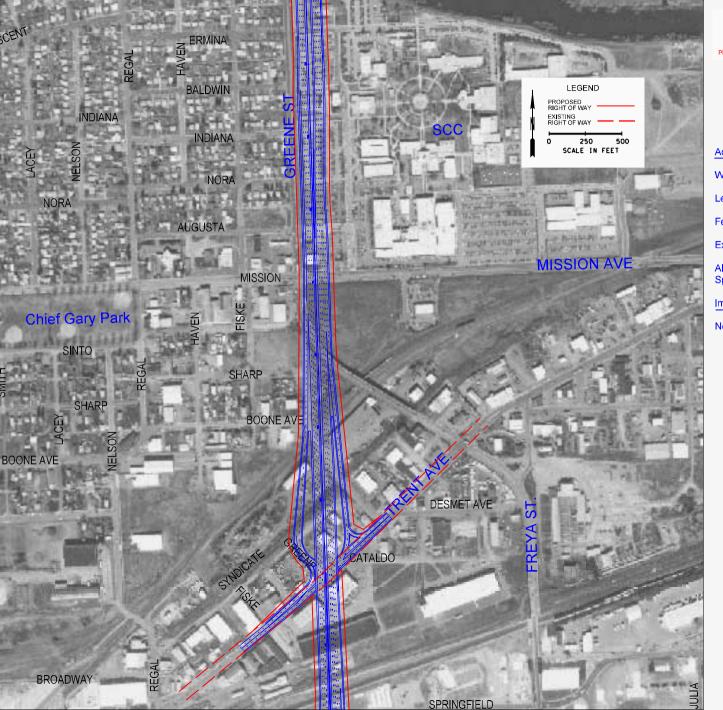
Better Expansion Abilities (Tight Urban)

Meets Driver Expectancy

Alignment and Profile of I-90 Can Be Modified for Better Geometrics

Impacts / Disadvantages

More Residential and Business Impacts Higher Cost



MODIFIED TRENT AVENUE INTERCHANGE

PRELIMINARY - SUBJECT TO REVISION SEPTEMBER 18, 2001

Advantages

Weave Between I-90 and Trent Eliminated

Less Right of Way Impacts

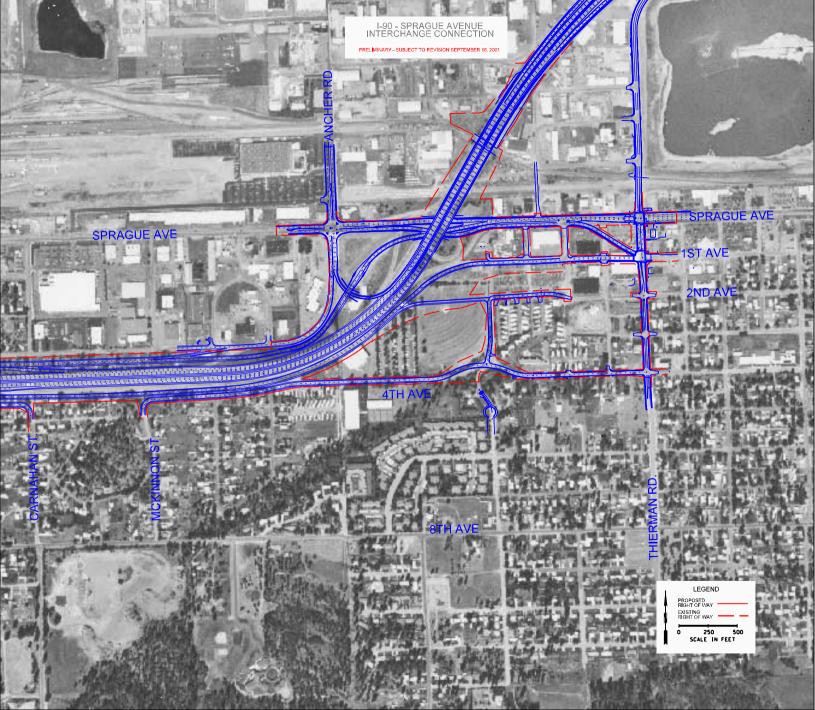
Fewer Structures Less Cost

Expandable

Allows for Half Diamond Connection from Sprague to NSC

Impacts / Disadvantages

Not a full movement Interchange



LIBERTY PARK INTERCHANGE

SUMMARY OF ENVIRONMENTAL, OPERATIONAL, & COSTS SCREENING CRITERIA & INFORMATION

Liberty Park Interchange (Sherman Ave to Altamont St): Additional Engineering and Environmental Analysis Update

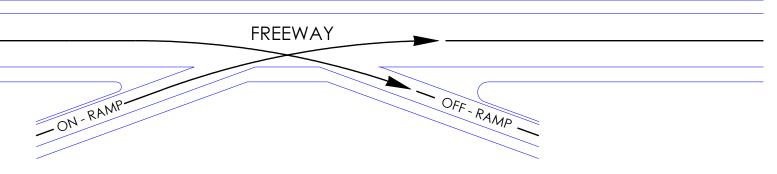
	Preliminary Preferred Alternative					
Environmental	Modified FEIS	FEIS	Modified Liberty Park	Modified Arthur	T.U.D. Tight Urban Design (Perry St. connection)	Modified T.U.D.
Noise Impacts (>=10dBA increase remaining after abatement)	Mitigate as required	Mitigate as required	Mitigate as required	Mitigate as required	Mitigate as required	Mitigate as required
Residential Displacements (Housing Units)	91	79	125	114	141	124
Business Displacements	1	2	1	6	1	1
Employment Displacement	9	19	9	69	9	9
Church Displacements	1	1	1	1	1	1
Air quality Visual (scale 1 to 10; looking towards	Mitigate as required	Mitigate as required	Mitigate as required	Mitigate as required	Mitigate as required	Mitigate as required
facility - 10 being the best)	8.1	6.0	7.6	7.9	5.2	5.6
, , ,	Minimal impacts to Perry St. neighborhood. Minor impacts to Liberty Park. Minor impacts to businesses. No direct south hill access.	Minimal impacts to Perry St. neighborhood. Minor impacts to Liberty Park. Minor impacts to businesses. No direct south hill access.	Revises Eastbound/Westbound on ramp to I-90. Minimal impacts to Perry St. neighborhood. No direct south hill access. Minimal business impacts.	Slight increase in traffic along Perry St due to the westbound I-90 access. Largest impact on businesses. Direct south hill access.	Adds direct access from I-90/Hamilton Street to Perry Street area. Increases traffic on Perry to near capacity for two lanes during peak hours. Pedestrian movements greatly impacted during peak hours. Probable business impacts on Perry. Eases burden on other arterials.	Minimal impacts to Perry St. neighborhood. No direct access from I-90 to Perry Street area.
Compatible with City Six-Year Street Program Neighborhood Traffic and Circulation Comprehensive Plan(s)	Yes	Yes - Per Approved FEIS	Yes	Yes	No - Does Not Meet Policy N 4.2 - Neighborhood Streets	Yes
Schools (I-90 Proximity and Pedestrian Safety)	I-90 proximity to Grant Elementary School is approximately 2500 feet	I-90 proximity to Grant Elementary School is approximately 2500 feet	I-90 proximity to Grant Elementary School is approximately 2500 feet	I-90 proximity to Grant Elementary School is approximately 2500 feet. Slight traffic increase near Grant Elementary School during drop off and pick up times due to I-90 westbound access.	I-90 proximity to Grant Elementary School is approximately 2500 feet. Moderate traffic increases near Grant Elementary School during drop off and pick up times due to I-90 access.	I-90 proximity to Grant Elementary School is approximately 2500 feet
Archeological, Cultural, Historical Resources (City/County/State Registers)	Olmstead Park Landscape	Olmstead Park Landscape	Olmstead Park Landscape	Olmstead Park Landscape	Olmstead Park Landscape. One House (City Historical Register)	Olmstead Park Landscape
Parks and Trails	Minimal impacts to Liberty Park or Pedestrian Trails	Minimal impacts to Liberty Park or Pedestrian Trails	Approximate 0.2 acre take of Liberty Park for 4th Ave./ Helena St. connection. Existing pedestrian trails not impacted	Minimal impacts to Liberty Park or Pedestrian Trails	Approximate 0.2 acre take of Liberty Park for 4th Ave./ Helena St. connection. Existing pedestrian trails not impacted	Approximate 0.2 acre take of Liberty Park for 4th Ave./ Helena St. connection. Existing pedestrian trails not impacted
Operational Aspects						
Driver Expectancy	Provides three of four directional movements- no South Hill Access from I-90. Out of Direction travel required between Hamiltion St. and South Hill	Provides three of four directional movements- no South Hill Access from I-90. Out of Direction travel required between Hamiltion St. and South Hill	Provides three of four directional movements- no South Hill Access from I-90. Out of Direction travel required between Hamilton St. and South Hill	Provides three of four directional movements- no South Hill Access from I-90. No out of Direction travel required between Hamilton St. and South Hill	Full Movement Interchange. No out of direction travel required.	Provides three of four directional movements- no South Hill Access from I-90. Out of Direction travel required between Hamilton St. and South Hill
Signing/Driveability	Utilizes standard interchange signing. Advanced signing necessary to limit confusion. South Hill Traffic must be directed to Division or Thor / Freya from I-90	Four destinations routed through one location. South Hill Traffic must be directed to Division or Thor /Freya from I-90. Difficult to sign.	Utilizes standard interchange signing. Advanced signing necessary to limit confusion. South Hill Traffic must be directed to Division or Thor / Freya from I-90	Utilizes standard interchange signing. Advanced signing necessary to limit confusion. South Hill Traffic must be directed to Division or Thor / Freya from I-90	Utilizes standard interchange signing. Advanced signing necessary to limit confusion	Utilizes standard interchange signing. Advanced signing necessary to limit confusion. South Hill Traffic must be directed to Division or Thor / Freya from I-90
	Local to System Access to I-90: No access to Altamont to/from I-90 No access to South Hill from/to I-90	Local to System Access to I-90: No access to Altamont to/from I-90 No access to South Hill from/to I-90	Local to System Access to I-90: No access to Altamont to/from I-90 No access to South Hill from/to I-90	Local to System Access to I-90: No access to Altamont to/from I-90 Provides Westbound on to I-90 from Arthur	Local to System Access to I-90: No access to Altamont to/from I-90 Provides full access to I-90 to/from South Hill	Local to System Access to I-90: No access to Altamont to/from I-90 No access to South Hill from/to I-90
Local Access	Local to Local Across I-90: New structure replaces Perry tunnel at Helena Street Construct new Atlamont, Thor/Freya, and Havana structures on I-90	Local to Local Across I-90: New structure replaces Perry tunnel at current location Construct new Altamont, Thor/Freya, and Havana structures on I-90	Local to Local Across I-90: New structure replaces Perry tunnel at Helena Street Construct new Altamont, Thor/Freya, and Havana structures on I-90	Local to Local Across I-90: New structure replaces Perry tunnel at Helena Street Construct new Altamont, Thor/Freya, and Havana structures on I-90	Local to Local Across I-90: New structure replaces Perry tunnel at Helena Street Construct new Altamont, Thor/Freya, and Havana structures on I-90	Local to Local Across I-90: New structure replaces Perry tunnel at Helena Street Construct new Altamont, Thor/Freya, and Havana structures on I-90
Emergency Response Accessibility to Liberty Park (Referenced to Ninth and Perry)	No Change	No Change	No Change	Direct access to Westbound I-90 if alternate route is needed.	Direct Access to and From I-90 is available if alternate route is needed	No Change
Land (Sherman Ave to Altamont St) Commercial (Acres) Residential (Acres) Total acres required for Right of Way	1.38 15.4 16.78	1.06 12.77 13.83	2.13 20.6 22.73	2.8 19.8 22.6	3.11 24 27.11	2.13 20.44 22.57
Estimated Costs (in millions)		04:-				90.5
Right of Way	\$4.0 \$7.9	\$44.7 \$10.1	\$5.8 \$9.7	\$7.5 \$9.8	\$8.2 \$10.7	\$5.8 \$10.5
Preliminary Engineering Cost to Mitigate Operations /Environmental Concerns	\$7.9	\$10.1 \$2.2	\$9.7 \$2.3	\$9.8 \$2.9	\$10.7 \$2.0	\$10.5 \$1.8
Construction	\$61.4	\$73.8	\$75.0	\$75.6	\$82.9	\$81.2
Total Project Cost	\$75.6	\$130.8	\$92.8	\$95.8	\$103.8	\$99.3
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PRELIMINARY - SUBJECT TO REVISION 9-25-01

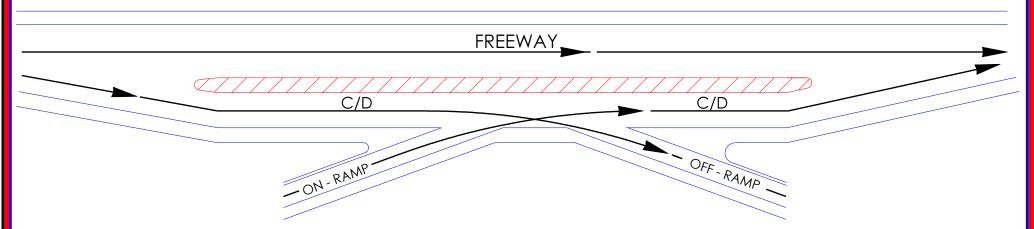
US 395 North Spokane Corridor

Why a Collector/Distributor?

A Collector/Distributor (C/D) is a limited access parallel roadway that reduces the number of freeway entrances and exits for the purpose of removing weaving between the entering and exiting of local traffic.



Weaving movements occur on the freeway, impacting the flow of the freeway traffic.



Weaving movements occur on the Collector/Distributor improving the flow of the freeway traffic.



Project Development Process

OVERALL CORRIDOR

1991-1997

Final Environmental Impact Statement (FEIS)

- Interdisciplinary Team (IDT) was Appointed in February 1991 to Help Direct Design and Environmental Studies
- Draft EIS Process
 Open House July 1991
 Open House October 1992
 Formal Public Hearing –
 September 1995
- Final Environmental Impact Statement (FEIS) Approved – April 1997
- Record of Decision Approved – November 1997

SPOKANE RIVER TO WANDERMERE

1998-2001

Supplemental EIS, Limited Access Plans, Property Purchase and Construction

- Began Preliminary Design Summer 1998
- Combined Design/Supplemental Environmental and Limited Access Hearing,
 Held – June 29, 2000
- Final Supplemental EIS Approved – September 2000
- Limited Access Plans Approved – October 2000
- Funds Authorized for Property Purchase for First Project (Hawthorne Road to US 2 Vicinity) – May 2000
- Develop Contract Plans for First Project – Fall 2000/Spring 2001
- Anticipated Property Purchases complete within limits of first project – Summer 2001
- Construction Begins on First Project (Hawthorne Road to US 2 Vicinity) – August 22, 2001

INTERSTATE 90 TO SPOKANE RIVER

1999-2001

Preliminary Design

- Began Preliminary Design Summer 2000
- Establish Design Advisory Group, of City, County, State and Public Representatives Assembled to Provide Input on Design Alternatives for the North Spokane Corridor Project October 2000 – November 2001
- Open House for I-90, Chief Garry, and East Central Neighborhoods September 25, 2001
- Selection of Preliminary Preferred Alignment Refinements October /November 2001
- Open House to Present Preliminary Preferred Alignment Refinements to public November 23, 2001
- Value Engineering Studies
 - a) Sprague Avenue to Spokane River – *September 1999*
 - b) Construction/Implementation of Facility *January 2002*

2001-2002

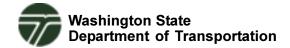
Environmental Re-evaluation

- Evaluation of Environmental Impacts Associated with Preliminary "Preferred Alternative" Refinements March 2001 – September 2002
- Development of Appropriate Documentation Under Federal Environmental Guidelines
 June 2001 – December 2002

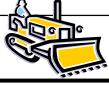
2001-2003

Design/Access Plan

- Continue to develop Preliminary Preferred Alternative and share information with the Public through Open Houses, Neighborhood and Group Meetings December 2001 – December 2002
- Final Open House prior to Design/Access Hearing December 2002
- Design and Limited Access Hearing – *January 2003*
- Final Design and Access Changes made -- *January/May 2003*
- Approval of Design and Limited Access Plans – May/June 2003
- Public Involvement (On-Going)
 - a) Newsletters
 - b) Web Site
 - c) Open Houses
 - d) Design Advisory Group Meeting
 - e) Presentations at Local Community Meetings
 - f) Individual and Group Meetings
 - g) Comment Forms



INFORMATIONAL ONLY SUBJECT TO REVISION



Benefits of the North Spokane Corridor

Safety

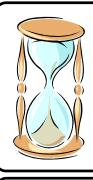
The North Spokane
Corridor is estimated to
save approximately \$22
million per year in societal
costs from accident
reduction.



The North Spokane
Corridor is estimated to save approximately 1.7 million gallons of gasoline annually.

Air Quality

The North Spokane
Corridor is estimated to reduce regional emissions by 2.4 million pounds of carbon monoxide per year.



Travel Time

The savings in travel time is estimated to be 2 million hours, equating to \$28 million annually.

Pedestrian/Bicycle Trail

Starting at the Spokane River, this commuter trail is approximately 8 miles long with connections to the Centennial Trail, SCC, and multiple access points.



Employment

Based on Federal Highway Administration research, each million dollars spent on highway construction supports 42 jobs across the nation, of which 25 jobs would be supported within Washington State. Therefore, assuming a funding stream of \$30 million per year in construction spending, the project could support 1250 jobs nationwide including 750 jobs within Washington State.





6/29/2000

Real Estate Acquisition Summary

Engineering creates the right of way plan sheets that show the areas needed to build the highway project. Real Estate Services is charged with the responsibility to acquire the needed property and assure the acquisitions are accomplished within the law. Eminent domain laws require the government to pay just compensation for the property needed for public uses. The steps in the acquisition process are as follows:

- Real estate appraisers will determine the market value of the property. The appraiser will:
 - Contact you for a joint inspection.
 - Research sales of similar property in the market area.
 - Value the property before and after the project.
 - Determine the damages, cost to cure items, or special benefits (increase in value due to the project).
 - Some parcels with minor acquisitions will be valued administratively using the appraiser's sales research. You have the right to request an appraisal on this administrative value.
- ♦ A review appraiser checks the appraiser's work and issues a 'Determination of Value' which is the just compensation that will be offered to you.
- ♦ A negotiation agent will contact you with the offer to purchase. You will be informed whether an appraisal or an administrative value is being used. The negotiator will:
 - Explain the project and its impacts to your property.
 - Explain your rights under the Eminent Domain laws.
 - Listen to your concerns and, if necessary, convey them to engineering or appraisal for review.
 - Discuss the acquisition with your professional advisors (appraisers, real estate agents, lawyers, etc.).
 - Provide all the documents necessary to acquire the property for the project.
 - Submit the signed documents to headquarters for payment processing. Payments are processed within 45 days of signature.
 - If the negotiator is unable to reach an agreement with you, we refer the acquisition to the Attorney General to begin condemnation proceedings. Condemnation is a legal action to acquire the property needed for the project after negotiations have been unsuccessful.
- ♦ If a residence or business is acquired by the state, you or your tenant may be entitled to relocation benefits. A relocation agent will:
 - Explain the relocation benefits available to you under eminent domain laws.
 - Assist you in locating replacement housing.
 - Assist you in the move of your personal property.
 - Assist your business in re-establishing at their new location.
 - Assist tenants in locating replacement housing.

Three brochures, *Transportation Property Needs and You*, *Residential Relocation Assistance Program*, and *Business Relocation Assistance Program* are published by the Department of Transportation. These booklets provide more detail into the acquisition and relocation processes. You may request a copy by contacting:

Washington State Department of Transportation Eastern Region Real Estate Services 2714 North Mayfair Street Spokane WA 99207 (509) 324-6286



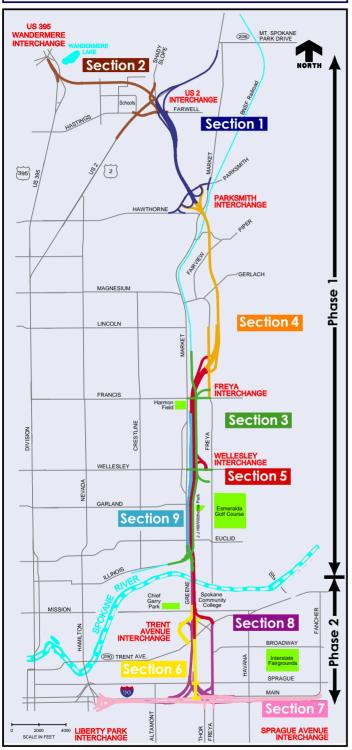
Washington State Department of Transportation

US 395 North Spokane Corridor Construction Sequence

Completion time 10 to 20 years dependent upon funding

Section 1 Hawthorne to US 2

- Project Length 1.72 Miles.
- Paved Roadway Construct a four lane <u>divided highway</u> to accommodate two Northbound and two Southbound lanes between Hawthome and US 2.
- Interchange Construction Construct the Northbound on and Southbound off loop-ramps for the Parksmith Interchange. Construct the US 2 Interchange.
- Construction Schedule: Start August 22, 2001.



The Limited Access and Right of Way Plans will be developed in two major phases:

Phase 1 Spokane River North This phase will establish a limited access corridor between the Spokane River and US 395 at Wandermere.

<u>Phase 2 Spokane River South</u> This phase extends the limited access corridor south from the Spokane River to 1-90 and constructs a Collector/Distributor (C/D) System along 1-90 between the Liberty Park and Sprague Avenue Interchanges; completing the overall transportation facility.

Washington State Department of Transportation

Section 2 US 2 to US 395 Wandermere

- Project Length 1.71 Miles.
- Paved Roadway Construct a four lane <u>divided highway</u> to accommodate two Northbound and two Southbound lanes between US 2 and US 395.
- Interchange Construction Construct the Wandermere and Farwell/US2 Interchanges.
- Realign The existing Shady Slope roadway to include modifications to US 2.
- Grading From Gerlach to Hawthorne, constructing the North and South alignments to subgrade only.

Section 3 Spokane River to Francis

- Project Length 2.75 Miles.
- Realign The BNSF Railroad tracks at Illinois and between Garland and Francis.
- Intersection Reconstruction At the intersection of Market/ Greene & Illinois.
- Existing Street Improvements At Wellesley and Francis.

Section 4 Francis to Hawthorne

- Project Length 2.75 Miles.
- Paved Roadway: Construct a four lane <u>divided highway</u> to accommodate two Northbound and two Southbound lanes between Francis and Hawthorne.
- Interchange Construction Complete the Parksmith Interchange and construct the Northbound on and Southbound off ramps of the Freya Interchange.
- Existing Street Improvements Along Freya between Francis and Lincoln.
- **Grading** From the Spokane River to Gerlach, construct the North and South alignments to subgrade only.

Section 5 Trent Avenue to Francis

- Project Length 3.37 Miles.
- Paved Roadway Construct a four lane <u>viaduct</u> on the corridor's East half, (Northbound lanes) to accommodate two Northbound and two Southbound lanes from Trent Ave. to the Spokane River.

Construct a four lane <u>divided highway</u> on the corridor's East half, (Northbound lanes) to accommodate two Northbound and two Southbound lanes from the Spokane River to Garland

Construct four lane <u>divided highway</u> two Northbound and two Southbound lanes from Garland to Francis.

 Interchange Construction Complete both the Wellesley and Freya Interchanges. Construct the Northbound on ramp for the Trent Ave. Interchange.

Section 6 I-90 to Trent Avenue

- Project Length 0.85 Miles.
- Paved Roadway Construct a four lane <u>viaduct</u> on the corridor's East half, (Northbound lanes) to accommodate two Northbound and two Southbound lanes from Main to Trent Ave.
- Interchange Construction Construct the Southbound off ramp for the Trent Ave. Interchange.

Section 7 Collector/Distributor System

- Project Length 3.32 Miles.
- Paved Roadway Construct the Collector/Distributor System along I-90 between the Liberty Park Interchange and the Sprague Ave. Interchange. This work includes local access improvements and the construction of an overcrossing for the future Thor/Freya Couplet.

Section 8 1-90 to the Spokane River Access Connection

- Project Length 1.66 Miles.
- Paved Roadway Construct a four lane <u>viaduct</u> on the corridor's West half, (Southbound lanes) to accommodate Southbound traffic from Main to the Spokane River. This work will include local access improvements along Freya, from I-90 to Trent Ave..
- Interchange Construction Construct Interchange ramp connections for the Collector/Distributor along I-90.

Section 9 Spokane River to US 2

- Project Length 7.03 Miles.
- Paved Roadway Pave the corridor's previously prepared subgrade, on the West half, (Southbound lanes) from the Spokane River to Francis. Also pave the General Propose/High Occupancy Vehicle Lanes from Spokane River to US 2.

PRELIMINARY SUBJECT TO REVISION



September 25, 2001 Spokane Community College Lair Building 1810 North Greene Street Spokane, WA

COMMENT SHEET

I-90 to the Spokane River Open House

Thank you for attending this evening's open house. If you have any questions or comments regarding this portion of the North Spokane Corridor project, please use this sheet to inform us.							
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Would you like so	meone from WSDOT to respond to your comments on this project b	y:					
Letter Phor	E-mail (Please provide e-mail address) No Response						
Name:	Date:						
Address:		_					
City:	State Zip						
Telephone:	e-mail Address:						

Please return to WSDOT by October 5, 2001



Please place this form in our open house drop box, or

mail to: WSDOT Attn: Keith Martin, P.E.

2714 N. Mayfair St., Spokane, WA 99207-2090

or Fax: 509-324-6099